A Research Proposal

on

Foreign Institutional Investment in India:

An Analysis since 2000

Submitted to

LOVELY PROFESSIONAL UNIVERSITY

in partial fulfillment of the requirements for the award of degree of

DOCTOR OF PHILOSOPHY (Ph.D.) In (Management)

Submitted by: **Supervised by:**

Suresh Kumar **Dr. Jasdeep Kaur Dhami**

FACULTY OF BUSINESS AND APPLIED ARTS
LOVELY PROFESSIONAL UNIVERSITY
PUNJAB

Introduction:

Since 1991 till date Indian economy has gone through many phases. It has seen many contemporary developments in terms of changing trends in economic growth, inflation, fiscal deficits, capital investment flows (FDI & FIIs),current account and capital accounts convertibility, foreign exchanges reserves etc. In 1991 when India faced major crunch of foreign exchange reserves, it opened up its economy and introduced many economic reforms with more thrust towards globalisation, privatisation and liberalisation. Over the years, out of these various economic contemporary phenomena, the one which has assumed great importance in the economic scenario of the Indian economy has been foreign capital flows (Foreign Institutional investments constituting major portion of total foreign investment in India). These inflows have had both positive as well as negative impact on the health of the Indian economy. On the positive side, these capital inflows have raised the level of economic development by augmenting the domestic investment, contributed towards increased market capitalisation, more competitiveness in the capital market and widened financial intermediation. But at the same time, these capital inflows have also posed several threats to the economic and financial system of the recipient economy like inflationary trends, appreciation in exchange rate, overheating of the economy and unmanageable volatility in the capital market due to the possibility of their sudden withdrawal. Thus over the years due to their increasing magnitude, the FII flows have impacted various economic factors in the Indian economy directly and indirectly like volatility in the stock market, risk-return patterns, inflationary trends, economic growth, foreign exchange reserves, decision on capital account convertibility and so on or vice versa.

Over the years, FIIs have been showing diversified magnitude and changing trends with various underlying reasons for the same. During the initial year 1992-93, when the FII flows started flowing into India it just amounted to Rs 13 cr. because at this moment government was framing policy guidelines for FIIs. However within a year in 1993-94 the FIIs flow rose to `Rs. 5127 cr. increasing with 39338 percent because government had opened door for investment in India. Thereafter, the FII flows witnessed mixed trends over the years like from 1994-95 to 2008-09, FIIs showed negative comparative growth. However from 1995-96 to 2009-10, they have been showing comparative positive growth. There have been many reasons for these non patterned flows of FIIs in Indian economy. In 1997-98, FII inflow posted fall due to the South East Asian Currency Crisis. In 1998-99 FIIs also flew back. This was primarily due the economic sanctions imposed on India by

US, Japan and other industrialized economies. These economic sanctions were the result of series of testing of nuclear bombs by India in May 1998. The slowdown in 2004-05 and 2005-06, 200 was on account of global uncertainties caused by hardening of crude oil prices and upturn in the interest rate cycle. During 2007-8 the whole world felt the heat of global financial crisis (popularly known as SUB-PRIME crisis) originated in USA. Even Indian economy could not remain unaffected from these global phenomena and in 2009-8-09 for the first time in the history since 1992 when FIIs first invested in Indian economy, it witnessed highest ever negative net investment outflow. During this period the gross purchases were Rs. 614575 and the gross sales were Rs. 6,60,386 Cr. It amounted to net out flow to the tune of Rs. 45,810 Cr. However as discussed earlier, FIIs flow has also shown positive trends over the last many years. In 2010 FIIs injected Rs. 1,12,000 cr.(net investment) in Indian equities. Even till date the trend is quite positive and FIIs has already made net investment to the tune of Rs 7335 cr. till March 2011.

It has been the experience over the years, Indian economy has not been immune to these FIIs flows. They have affected various economic factors of the economy considerably like volatility in the stock market, risk-return patterns, inflationary trends, and economic growth, foreign exchange reserves, market capitalisation of the companies listed with BSE, NSE, and government policy with regard to decision on capital account convertibility and so on or vice versa. Viewed from other perspective, there are many economic and financial determinants which have pulled and pushed the flows of FIIs into and out of India economy. Like Returns on Indian stock market, risk and inflation in foreign country might have positive impact on FIIs inflow whereas risk and inflation in domestic country and stock market returns in foreign country might have negative influence on FIIs investment to India. In addition to this, market capitalization, macro economic determinants like economic growth, liberalisation policy (i.e. more capital account convertibility) , burgeoning amount of foreign exchange reserves, decisions taken on tax benefits for FIIs in India might also have significant positive influence on FIIs flow in short-run as well long run. From time to time Government of India has taken many positive as well as precautionary initiatives to enhance the flow of FIIs into Indian economy but at the same time ensuring stability of stock market and protecting the interest of the shareholders. Like foreign firms and high net-worth individuals have been permitted to invest as sub-accounts of FIIs, FII ceiling under special procedure has been enhanced to 49 per cent, dual approval process of SEBI and RBI has got changed to single

approval process of SEBI, Investment cap for FIIs in Government securities and corporate bonds has been increased and so on.

Thus there are many perspectives attached with FIIs flows into Indian economy. From the problem of scarcity in the early 1990s to the problem of plenty now, the large foreign inflows into our economy has assumed utmost importance in recent times and managing such inflows have become a challenge in itself. Such inflows have thrown up new policy challenges as these inflows have influenced various macro level economic variables like inflation, , foreign exchange reserves, exchange rate (money value visa vis foreign currency), market capitalisation and so on etc. . Moreover, as India is in the process of liberalizing the capital account, it would have significant impact on the foreign investments and particularly on the FII, as this would affect the stability of the financial market in the short run as well as in the long run. And imposition of capital controls will reverse this process towards full convertibility of the rupee. This issue is extremely important for contemporary policy makers since managing such large FIIs inflows into India in recent times has come to haunt both the RBI and the Indian government.. Therefore in the light of the above scenario it has become important to study and analyse FIIs' magnitude, trends , determinants and their impact upon various macro level factors, and the impact of policy decisions taken by Government of India, RBI, capital market regulator (SEBI) to enhance and the flow of FIIs. It is hoped the insight offered by this research work will help us to construct suitable policies in such a way that on the one hand the Indian economy will enjoy a large inflow of FIIs but at the same time there will not be unnecessary enhanced degree of volatility in the capital market. This will go a long way in cementing and consolidating the economic scenario of Indian economy in general and confidence of the investors in particular[1].

Review of Literature : Since 1990 till date several research studies have been undertaken on FIIs Flow in India. However their results have been mixed in nature and at certain time contradictory with each other also. Some of the major studies and their summarised findings have been discussed in the following pages:

Classens (1993) analyzed the return and diversification benefits of investing for an investor in an industrial country with emerging markets and barriers which prevent a free flow of funds. Study found that equity portfolio flows can be affected by efficiency of

domestic stock market as well as market segmentation created by barriers. Investors' perception and attitude may thus matter as much as formal barriers.

Chuhan (1994) analyzed portfolio "switching" behaviour by investors between different emerging markets. Study has found that institutional investors from Canada, Germany, Japan, United Kingdom (UK) and United States (US) have not contributed to the growth in portfolio investment in emerging markets (the countries where they have invested). These investors, who otherwise are major players in international capital markets, have approached developing countries' securities markets with great caution. Institutional investors generally enter markets with significant liquidity, market capitalization and claim to have a longer time horizon in their risk return assessment than other investors such as performance based retail traders. Study concluded that any country that shows good track record in its reform process may expect to have a lower risk and e higher returns from portfolio investment, thus, consequently large portfolio flows are expected to go to such countries with "good" track records of liberalization, fiscal consolidation and regulatory reform than to those emerging markets that do not exhibit such a performance on sustained basis.

Gooptu (1994) undertook research on "Are Portfolio flows to Emerging Markets Complementary or Competitive' He concluded that there is a competition between developing countries for portfolio investment from abroad. The study analyzed gross portfolio investment flows for a sample of eight emerging markets over the period of 1989 to 1993 using quarterly data. Four countries in each geographical region, namely, India, Indonesia, South Korea and Thailand in Asia while Argentina, Brazil, Chile and Mexico in Latin America have been examined. All of these countries have experienced large portfolio investment inflows in recent years. However, the gross portfolio flows to Latin America has been observed to be more significantly related to East Asia (Indonesia, South Korea and Thailand) than those to South Asia i.e., India in this study. According to the study, it is important for the policy makers in the developing economies to provide right signals to international capital markets in terms of economic and domestic institutional reforms to successfully compete with other developing economies to attract portfolio investment from abroad. Study found that to attract more private capital flows policy makers must continue to provide right signal to foreign institutional investors in terms of economic and domestic institutional reforms that attract portfolio investment from abroad.

Study concludes that there is a need to continue for increasing pace of reforms in any given emerging stock market in order to maintain the steady portfolio flows to developing countries.

Agarwal (1997) found that world stock market capitalization had a favourable impact on the FPI in India. FII inflow depends on stock market returns, inflation rates (both domestic and foreign), and ex-ante risk. In terms of magnitude, the impact of stock market returns and the ex-ante risk turned out to be the major determinants of FII inflow.

Kumar (2001) investigated the effects of FII inflows on the Indian stock market represented by the Sensex using monthly data from January 1993 to December 1997. Kumar (2001) inferred that FII investments are more driven by Fundamentals and they do not respond to short-term changes or technical position of the market. This finding is in contradiction with the findings of Rai and Bhanumurthy (2003**)** who did not find any causation from FII to return in BSE using similar data between 1994 and 2002. However, Rai and Bhanumurthy have also found significant impact of return in BSE on NFI.

Chakrabarti (2001) made an empirical investigation to study the inter relationship between FIIs flows on one hand and equity returns in India in the Indian context on the hand. Following the Asian crisis and the bust of info-tech bubble internationally in 1998-99 the net FII declined substantially by US$ 61 million. Using the monthly data between May 1993 and Dec. 1999, Chakrabarti (2001) found that FII flows and stock returns are strongly correlated in India. The entire sample period was sub-divided into Pre-Asian Crisis and Post-Asian Crisis period to capture the impact of the Asian crisis on the net FII inflows. The study found that there appears to be significant differences in the nature of FII flows before and after the Asian crisis. In the pre-Asian crisis period any change in FII found to have a positive impact on the equity returns (FIIs acted as independent variable and other variable like return acted as dependent variable). But in the post-Asian crisis period it was found the reverse relation existed that is the change in FII was mainly due to change in equity returns (where FIIs acted as dependent and other variables like return acted as as independent variable). It was also found that FIIs did not have any informational disadvantage in comparison with domestic investors in India, since the US and world return were not significant in explaining FII flows. Besides, changes in country risk ratings for India did not appear to affect the FII flows. The beta of the Indian market with respect to S&P 500 index seemed to affect the FII flows inversely, but the effect

disappeared in the post-Asian crisis period. Thus there appeared to be significant differences in the perception of FII flows before and after the Asian crisis. In the post-Asian crisis period i.e. from 1998 onwards, returns on the BSE National Index became the sole driving force behind the FII flows.

Eun & Rensick (2002) observed that international portfolio Investment has been growing rapidly in recent years due to (a) deregulation of financial markets (b) introduction of new investment vehicles such as international mutual funds, country funds and internationally cross listed stocks which allow investors to achieve international diversification without incurring excessive costs. Despite sizable potential gains from international diversification, investors allocate a disproportionate share of their funds to domestic securities displaying the so called home bias. Home bias is likely to reflect imperfection in the international financial markets such as excessive transaction/information costs, discriminatory taxes for foreigners and legal/institutional barriers to international investments.

Mukherjee P (2002) undertook research study on 'Foreign Institutional Investment in the Indian Equity Market.' Contrary to the general perception of foreign investors' activities having a strong demonstration effect and driving the domestic stock market in India, evidence from causality tests conducted *suggests* that FII flows to and from the Indian market tend to be caused by returns in the domestic equity market and not the other way round.(returns acted as the driving force i.e independent variable)

Batra A (2003) in their study on 'The Dynamics of Foreign Portfolio Inflows and Equity Returns in India' used both daily and monthly data in order to understand the trading behaviour of FIIs and returns in Indian equity market. It was found that there is strong evidence of FIIs chasing trends and adopting positive feedback trading strategies at the aggregate level on a daily basis. However there is no evidence of positive feedback trading on a monthly basis. The results of our analysis also indicate that foreign investors have a tendency to herd together in their trading activity in India. The trading behaviour and biases of the FIIs do not appear to have a destabilizing impact on the equity market.

Trivedi & Nair (2003) in their study on **'**Determinants of FII Investment Inflow to India' concluded that any investments, either domestic or foreign, would depend heavily on the

risk factors. Hence, while studying the behaviour of FII, it is important to consider the risk variable. But it was only Trivedi & Nair who considered this factor in their study in 2003.. Further, they have decomposed it (risk) into realized risk (observed) *ex-ante* and unexpected risk. Ex ante risk is an observed component and is negatively related to FII. But the relationship between unexpected risk and FII is obscure. Hence, one needs to separate the unobserved component from the realized risk while examining the impact of risk on FII.

Gordon and Gupta (2003) in their study on 'Portfolio Flows into India: 'do domestic fundamentals matter' conclude that given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are increasing Hence, there is a possibility of bi-directional relationship between FII and the equity returns.

Boss and Coondoo (2004) undertook study on 'Impact of FII regulations in India – A time series intervention analysis of equity flows.' In this study they examined the impact of regulations over FIIs in India and gave an interesting results that the restrictive measures aimed at achieving greater control over FII flows do not show any significant negative impact on the net inflows. They also found that FII restrictive policies mostly render FII Investments more sensitive to the domestic market returns and raise inertia of the inflow.

Griffin and Nardari (2004) in their study titled 'Are daily cross-border equity flows pushed or pulled' found that foreign flows are significant predictors of returns for Korea, Taiwan, Thailand and India, indicating that foreign investors are buying before market index increases. Increasing trends of FIIs inflows can act as a predictor for upward trend in the value of index or vice versa. FII and Stock Index show positive correlation, but fail to predict the future value. They also found that contemporaneous flows are positive and highly significant in India.

Kumar SSS (2005) in his study on 'Role of Institutional Investors in Indian Stock Market' examines the 'pulling' and 'pushing' role of Foreign Institutional Investors in

Indian stock markets. He finds using granger causality test that the market movement can be explained using the direction of the funds flow from these investors.

Rai and Bhanumurthy (2006) in their study on 'Determinants of Foreign Institutional Investment in India' studied and analyzed the determinants of foreign institutional investment in India using monthly data from January 1994 to November 2004. The study revealed the positive association of FIIs investment with return on BSE Sensex, inflation in US (home country) ; and negative association with inflation in India (host country), return on S&P 500 index, ex-ante risk on BSE and ex-ante risk on S&P 500 index. Thus empirical estimates seems to be perfectly in consensus with the proposed theoretical model, except for ex-ante risk in US stock market, which adversely affects the FII flow to India. This could be due to the dominant position of US stock market. However, the ex-post risk neither in US nor in India affected FII inflow to India. Study also did not find any causation running from FII inflow to stock market returns in BSE as it was found by some existing studies (Gordon & Gupta, 2003). Study concluded that stabilizing the stock market volatility and minimizing the ex-ante risk would help in attracting more FII inflows. Otherwise there would be adverse impact of non-fundamental factors on FII behaviour which in turn would affect the real economy in the long-run. They further studied the impact of news on FII flows and found that the FIIs reacted more (sell heavily) to bad news than to good news.

Saji kumar (2006) in his study titled 'FII vs. Sensex: An Emerging Paradigm' analyses the performance of Sensex in terms of market Capitalisation , movement of Sensex, Returns on Sensex, trade turnover and Sensex P/E ratio and found out that they are significantly related to the surge in FII's inflows. The behaviour of returns on Sensex and volatility has been more stabilizing due to external inflows and the fluctuations are largely due to withdraws by the domestic equity holders during the period considered.

Singh (2008) in his study on 'FII Investment Flow and SENSEX Movement' concluded that there are many variables which contribute to the positive growth of the stock market. FIIs investment is considered to be one of the biggest push after the economic fundamentals got stronger. The liberalisation of the FII flows into the Indian Capital Market since 1993 has had a considerable impact on Indian stock market.

Babu and Prabheesh (2008) **i**n their study on 'the study of causal relationships between FIIs and stock returns in India' concluded that the FII investments in India are more stock returns driven. Perhaps the high rates of growth in recent times coupled with an increasing trend in corporate profitability has imparted buoyancy to the stock markets, triggering off high and thereby leading to return chasing behaviour by the FIIs.

Chakraborty (2007) undertook study on 'Foreign Institutional Investment Flows and Indian Stock Market Returns: A Cause and Effect Relationship Study'. The empirical investigation of the direction of causation between FII flows to India and Indian stock market returns over the time period from April 1997 to March 2005 has revealed that FII flows are caused by; rather than causing the national stock market returns. However, the Indian policy makers must adopt a cautious approach while further liberalizing the FII policy by instituting in-built cushion within the system against the possible destabilizing effects of sudden reversal of FII flows.

Rajput & Thaker (2008) in their study on **'**Exchange Rate, FII and Stock Index Relationship in India' concludes that in globalized world, exchange rate, FII and Stock Index are important economic variable and reflect underlying strength and stability of business and an economy. Earlier study findings have revealed positive, negative and mixed relationship amongst those variables. They measure the relationship and its predictive power for the period ranging from January 2000 to December, 2005, in the light of third generation reforms in India. Using simple correlation and regression analysis it is found that no long run positive correlation exists between exchange rate and Stock Index except for year 2002 and 2005. FII and Stock Index show positive correlation, but fail to predict the future value.

Kumar and Gupta (2010), in their study on 'FII Flows to India: Economic Indicators' concludes that the trading by the FIIs in the Indian stock market is registering sharp hike every year but their net investment is often registering negative growth rate. It can be said here that they are much interested in making short-term profit by trading in the market. Their investment is equity oriented which accounts around 95 percent of the total investment. It has also been found that share of FIIs cumulative investment in the total market capitalization is below five percent and share of trading by FIIs in the total stock

market turnover is around 17 percent. Though enjoying a lesser share in the stock market, the FIIs have emerged as the big custodian in the Indian capital market.

Research Gap: Over the years there has been a tremendous growth of FIIs flows in Indian economy. The phenomena has given rise to many results including enhanced capital formation, the unwarranted volatility into the Indian stock market. As a results, research on FII flows in the country has become very important both for academicians and policy makers. In majority of the studies, stock market has been the main determinants and the other factors have not got the required attention. There is also some void in the field of research on FII flows and the study on FII flows need more intensive investigation. This could fill part of the existing knowledge gap. The present research will be undertaken with the same orientation.

Objectives:

1. To study the magnitude and trends of FIIs flows in India since 2000 and their forecasting.
2. To find out the factors affecting FIIs flows in India.
3. To examine the relationship between FIIs and others economic factors like stock market, foreign exchange reserves, exchange rate and inflation.
4. To bring out the impact of FIIs investment on the volatility of the stock market in India.

Hypothesis

i) The economic fundamentals such as stock market return, exchange rate, foreign exchange reserves, and inflation rate do not affect the flows of FII in India.

ii) There is no impact of FII flows on the stock market volatility in India

Research Methodology:

This study aims at, analyzing the relation between the FII flows and others economic variables such as stock market, foreign exchange reserves, exchange rate and inflation. Data for the study will be secondary in nature and the period of study will be from 2000 onwards.

Data Analysis

The data on FII flows (sale and purchase), stock market , foreign exchange reserves, exchange rate and inflation will be collected from various secondary recourses/sites and the same will be analysed elaborately underlying the reasons for the same. And for estimating FII flows for future period and analysis, techniques such as correlation analysis, ARIMA (Autoregressive Integrated Moving Average), Granger Causality Test, VAR (Vector Auto regression) ,Variance Decomposition, IRF (Impulse Response Function) may be used.

Selection of Variables:

The present study will include five variables Foreign Institutional Investments, BSE Sensex, Exchange rate, foreign exchange reserves and inflation.

Proposed Scheme of Chapertisation:

First chapter will be dedicated to the introduction to the subject matter.

Second Chapter will be focused at review of literature**.**

Third chapter will study the trends, volume and composition of FIIs flows.

Chapter fourth will study the factors affecting FII flows and the relationship between FIIs and others economic factors like stock market, foreign exchange reserves, exchange rate and inflation..

Chapter fifth the last chapter gives a summary of major findings and suggestions of the study.

References:

[1] WWW.sebi.gov.in

[2] Classens, Stinj. (1993) "Equity Portfolio Investment in Developing Countries: A Literature Survey", World Bank Policy Research Working Paper No.1089, Washington D.C.

[3] Chuhan, P. (1994) "Are Institutional Investors an Important Source of Portfolio Investment in Emerging Markets?" World Bank Policy Research Working Paper No. 1243, Washington D.C.

[4] Gooptu, S. (1994) "Are Portfolio flows to Emerging Markets Complementary or Competitive", World Bank Policy Research Working Paper No. 1360, Washington D.C.

[5] Agarwal, R.N. (1997) "Foreign Portfolio Investment in Some Developing Countries: A study of Determinants and Macroeconomic Impact", *Indian Economic Review,* Vol. XXXII, No. 2, Pp.217-229.

[6] Kumar, SSS. (2001) "Does the Indian Stock Market Play to the Tune of FII Investments: An
Empirical Investigation", The IUP Journal of Applied Finance, Vol. 7, No. 3, pp. 36-44.

[7] Chakrabarti, Rajesh. (2001) "FII Flows to India: Nature and Causes", Money and Finance, Volume 2, Issue 7, Oct-Dec, Pages: 61-81.

[8] Eun, Cheol S. and Bruce G. Rensick. (2002) "International Financial Management. 2nd Edition Irwin: Mcgraw Hill Publishing."

[9] Mukherjee, Paramita and Dipankor Coondoo (2002) **"**Foreign Institutional Investment in the Indian Equity Market: An Analysis of Daily Flows During January 1999—May 2002**",** *Money and Finance,* Oct03 –March 04.

[10] Batra, A. (2003) "The Dynamics of Foreign Portfolio Inflows and Equity Returns in India".

[11] Trivedi, Pushpa, Nair,A. (2003) "Determinants of FII Investment Inflow to India", Presented in 5th Annual conference on *Money & Finance in The Indian Economy*, held by Indira Gandhi Institute of Development Research, Mumbai, January 30– February 1.

[12] Gordon, James and Gupta,P. (2003) "Portfolio Flows into India: Do Domestic Fundamentals Matter?", *IMF Working Paper Number WP/03/02.*

[13] Bose,S and Coondoo,P. (2004) "Impact of FII regulations in India – A time series intervention analysis of equity flows", ICRA Bulletin, pp.54 – 83.

[14] Griffin, J.M., Nardari, F. and Stulz, R.M. (2004) "Are daily cross-border equity flows pushed or pulled", The Review of Economics and Statistics, Vol. 86, pp.641–657.

[15] Kumar, SSS. (2005) "Role of Institutional Investors in Indian Stock Market", International Journal of Management Practices and Contemporary thoughts, pp. 76 – 80.

[16] Rai, K. and N. R. Bhanumurthy (2006) "Determinants of Foreign Institutional Investment in India: The Role of Risk Return and Inflation". The Developing Economics, Vol. XLII –4, pp. 479 – 493. http://iegindia. org/dis_rai_71.pdf.

[17] Kumar Saji (2006) 'FII VS Sensex An Emerging Paradigm" The IFCAI University Press. Pp.43-49

[18] Singh A, Rajput and Thaker,K. (2008) "Exchange rate, FII & Stock Index relationship in India", *Vilakshan, XIMB Journal of Management*, pp. 43- 56

[19] Singh Dr. Rahul (2008) "A Study of FII Investment Flow and SENSEX Movement"

[20] Babu. Suresh,and Prabheesh,P.K.(2008) In their study on "the causal relationships between FIIs and stock returns in India", *Int. J. Trade and Global Markets, Vol. 1, No. 3, 2008,pp 259-265*

[21] Chakraborty Dr. Tanupa (2007) "Foreign Institutional Investment Flows and Indian Stock Market Returns . A Cause and Effect Relationship Study", *Indian Accounting Review.*, Vol. 11, No. 1, June 2007, pp. 35-48.

[22] Rajput. A & Thaker.K (2008) 'Exchange Rate, FII and Stock Index Relationship in India", Vilakshan, XIMB Journal of Management; March, 2008

[23] Kumar. R and Gupta.H (2010) "FII Flows to India: Economic Indicators ", Journal of Indian Management, January - March, 2 0 1 0 .

[24] Kaur.M and Dhillon,S.S. (2010) "Determinants of Foreign Institutional Investors' Investment in India", Eurasian Journal of Business and Economics 2010, 3 (6), 57-70.